TRANSACTIONS OF THE NEW YORK SURGICAL SOCIETY.

Stated Meeting, October 9, 1895.

The President, ROBERT ABBE, M.D., in the Chair.

THYROIDECTOMY FOR EXOPHTHALMIC GOITRE.

DR. WILLIAM B. COLEY presented a woman, aged thirty-two years, upon whom he had operated at the New York Cancer Hospital, on April 6, 1895, for a well-pronounced goitre associated with exophthalmos and rapid heart-action. The pulse before operation ranged between 100 and 110. The dyspnœa was very great, and the slightest exertion caused a feeling of suffocation. The patient could speak only in a whisper.

The operation consisted in removing the entire left half of the tumor and closing the wound without drainage. The hæmorrhage was considerable and difficult to control. A large number of ligatures were used. The patient's condition was critical for a time after the operation, with marked acceleration of the pulse and respiration.

The portion removed measured four and a quarter inches by two inches, and weighed three and a quarter ounces.

Microscopic examination showed the tumor to be a cystic adenoma of a highly vascular type.

The wound healed by perfect primary union, and recovery was rapid.

Her voice has become quite normal, her dyspnœa has entirely disappeared, her exophthalmos is less marked, and her heart-action less rapid.

DR. FRED. KAMMERER said that while some surgeons had seen no bad effects after thyroidectomy, others, like Kocher and Mikulicz, had seen some very serious results from operative interference with exophthalmic goitre. Dr. Kammerer had himself, at a former meeting of the Surgical Society, reported two fatal cases, the only ones of

quite a number of thyroidectomies. In one the four thyroid arteries were tied; in the other the entire gland was removed with the exception of that portion supplied by one of the inferior thyroid arteries. In both cases the pulse and respiration began to increase very soon after the operation, the former becoming very rapid, and finally averaging more than 200 beats. Both patients died within fifteen hours, careful dissection in the case of ligation showed that no unintentional damage had been inflicted on neighboring tissues, such as nerves. Owing to this experience, he would be very cautious about attacking these cases, and other surgeons, he believed, had had similar experience. The operation itself was not more difficult, from the fact that we were dealing with an exophthalmic goitre, but the difficulty here also was dependent on the variety under observation (vascular).

He added that he did not think the dangerous or fatal symptoms alluded to depended upon the hæmorrhage. In his first fatal case he made a careful post-mortem examination, thinking he might have ligated a nerve, but found that he had not. The operation had been a clean and relatively easy one. Kocher, who had published a thousand cases of goitre, had warned us of the liability of such symptoms arising after a clean operation in exophthalmic cases.

DR. A. J. MCCOSH remarked, as to the amount of hæmorrhage in such operations, that in a case operated upon by himself six months before, a great deal of blood was lost during the excision of the tumor, and afterwards the bed from which the gland had been removed continued to ooze blood very freely. As it was impossible to control the hæmorrhage by ligature, packing was employed. The pulse had varied before the operation between 145 and 155. About five months subsequently it had fallen to 100, the patient had gained seventeen pounds in weight, was no longer breathless, the exophthalmos had disappeared, and she showed great improvement from the operation.

He referred to a medical meeting at which he had shown this patient, and at which eight deaths were reported as having occurred from thyroidectomy in cases of exophthalmic goitre in New York City during last year, and all in the practice of the ten men who were present at the meeting.

DR. B. F. CURTIS said that another feature of danger after operation for exophthalmic goitre was great rise of temperature with certain cerebral symptoms, ending in one of his cases in death. Dr. Starr, who had seen the patient, thought the symptoms resembled those of over-feeding with thyroid gland tissue, and suggested that

they were caused by absorption of thyroid material in the wound. Two other patients operated upon by him recovered, and had shown permanent relief of symptoms. The operations had not been particularly bloody, and there had not been more cardiac depression than in ordinary goitre cases. In one of the cases which recovered there was a rise of temperature during the first twenty-four hours, with no signs of sepsis. Sepsis was also entirely absent in the fatal case. There had been a slight nephritis, but it was not worse after the operation, and would not account for the rise of temperature, although it might account for the nervous symptoms.

Since Dr. Starr had suggested absorption of thyroid material as the cause of such rise of temperature, he had looked for it in cases of ordinary thyroidectomy, and had seen something similar in one case. He was not sure, however, but that slight septic infection might in this instance have been the cause of the rise in temperature, or possibly there had been some iodoform absorption in this case, but in the other two cases iodoform was not used.

GASTRO-ENTEROSTOMY WITH MURPHY'S BUTTON.

Dr. Charles K. Briddon presented a man, fifty years of age, upon whom, June 19, 1895, he had performed gastro-enterostomy with Murphy's button on account of carcinoma of the pylorus. There was apparently complete stenosis of the pyloric orifice, and consequent great emaciation.

An incision four inches in length was made transversely across the epigastrium, the peritoneal cavity was opened, and stomach presented in the wound. A cancerous growth was easily felt, involving the pylorus and first part of the duodenum. The omentum and peritoneum, as far as could be made out, were not involved.

The omentum and colon were raised up, the lesser peritoneal cavity opened by blunt dissection through the mesocolon. The stomach was rotated forward and upward on its long axis, thus exposing its posterior surface. The jejunum was then looked for and found without difficulty. This was followed up to a point near its junction with the duodenum. An intestinal suture was placed in the jejunum at this point, including all of its coats in the form of a purse-string. An incision was made at a point within the purse-string, and the male portion of a Murphy button inserted and tied in position by tightening the purse-string suture.

A point on the posterior surface of the stomach was similarly

treated, the female part of the button being inserted. The two parts of the button were then united, and excellent apposition obtained.

The abdominal wall was closed by a single layer of silkworm-gut sutures. An uncomplicated convalescence followed. The button was passed *per anum* on the thirteenth day afterwards. Since the operation the patient has increased in weight and strength.

INTRAPERITONEAL RUPTURE OF THE BLADDER.

DR. CHARLES K. BRIDDON read the paper upon this subject, for which see page 706.

DR. B. F. CURTIS thought the suggestions of the author with regard to draining the bladder by catheter or through the perineum were in accord with prevailing practice, but it seemed to him unnecessary. Wounds in the bladder would heal well enough if the viscus were allowed to evacuate itself at stated intervals, or if the fluid were drawn off by urethral catheter regularly. This had proven true in some cases of suprapubic section and suture of the bladder performed by him, and the results had been very good. Recently, in looking up the question of wounds of the bladder during operations for hernia, he had found about twenty cases in which the details of the treatment were given, the number of cases in which catheter drainage was carried out being about equal to those in which it was not. The percentage of cases in which primary union was obtained was about the same in the two classes. Of course, if the catheter were not left in the bladder, some means would have to be taken to prevent the organ from becoming over-distended. Some surgeons used a catheter at regular intervals, while others simply had the patient evacuate the bladder every two or three hours. Dr. Curtis thought that this was preferable to draining the viscus, and it certainly showed that it was not necessary to drain through the abdominal wall.

DR. BRIDDON replied that the criticism made by Dr. Curtis did not apply to the cases in question, for there was a pronounced difference between suprapubic section of the bladder communicating with the outer world and a rent in the wall of the viscus communicating with the peritoneum. In suprapubic section of the bladder it was practically immaterial what one did with the wound, or whether the line of suture healed or did not heal, as no mischief would result. In intraperitoneal rupture the wound was fraught with immediate danger. He would not like to subject his patient with intraperitoneal

rupture to the danger of the sutures giving way from distention of the viscus.

Dr. Curtis rejoined that where the wound healed primarily, there was no danger of peritonitis, whether it were intraperitoneal or extraperitoneal. In fact, he thought it was easier to get primary union in a wound of the peritoneal surface. It was only necessary to see that the bladder did not become overfilled. Of course, if the wound leaked and urine entered the peritoneum, the patient would die, but he thought that wounds closed in the careful manner described in the paper would heal by primary union, and that it was an advantage not to be compelled to drain the bladder also in cases in which it was necessary to drain the peritoneal cavity.

Dr. Hotchkiss said that during the past summer, while operating in a case of tuberculosis of the peritoneum and bladder, he had accidentally made a small wound into the posterior wall of the bladder and closed it by sutures. No provision was made for drainage except that the catheter was passed at moderately frequent intervals. The wound healed primarily, but reopened after about ten days, as he supposed, because of breaking down of the tubercular walls. It had become shut off, however, by adhesions and closed later without interference on his part. He also remarked that the final result in cases of rupture of the bladder was much influenced by the length of time which intervened between the accident and the operation. It seemed to him that the patients had died of peritoneal sepsis, independent of drainage of the bladder or peritoneum, the absorption of septic material before the operation being sufficient to determine the fatal result.

Dr. Briddon said that the case related by Dr. Hotchkiss was quite different from one of extensive rupture. It was a small wound, and the probabilities were that it would have done no harm if left open. It seemed that almost anything could be done with a tubercular peritoneum and the patient would get well. He recalled a case which he had reported ten or fifteen years ago. He was called to Long Island to operate on a child supposed to have appendicitis. It was *in extremis;* the lips were retracted, the teeth and mouth were covered with sordes. He felt a tumor at one side of the median line, and on opening the abdomen by artificial light, a cyst bulged into the incision, into which a free incision was made, and it was then discovered that he had opened the bladder; he did nothing with it, did not even sew it up, and the child got well.

As to intraperitoneal ruptures of the bladder in general, he was under the impression that in cases in which an autopsy had been made the sutures were found to have yielded in a good many. One was apt not to get primary union. It was quite different in clean incised wounds. In rupture there were ragged, bruised edges, which had been soaking in urine some hours before being sutured, a condition not very favorable for primary union. He certainly would feel safer with a catheter introduced through a perineal opening; it complicated the case but little, and the patient would probably prefer it to repeated introduction of a catheter through the urethra. But the point which he would again specially emphasize was the necessity for operating, if possible, immediately after the accident,—not wasting time in waiting for symptoms to confirm the diagnosis.

ECTOPIC GESTATION.

DR. BRIDDON presented specimen of fœtus and its adnexa, removed by operation in a case of extra-uterine pregnancy, with the following history: The woman, who was twenty-eight years of age, had borne one child six years before. Had had no miscarriages until during present illness, which dated back ten weeks previous to her admission to hospital. She then had an attack of pelvic and lumbar pain, followed, two days later, by hæmorrhage from the uterus, which continued until, at the end of two weeks, she aborted a two months' fœtus. Since then the pain in the back and lower abdomen still continued, becoming remittent in character and most marked on the right side. For four weeks she had painful and difficult micturition. Has lost flesh and strength, while abdomen began to increase in size.

Pelvic examination revealed a large, slightly tender, firm mass behind the uterus which about filled up the cul-de-sac of Douglas.

Upon opening the abdomen a large, soft uterus was exposed with small intestine adherent to it. After tearing adhesions, a large, bluish-black mass was seen behind and to the right of the uterus. On still farther separation of adhesions it was found that the mass on the right extended as well towards the left. This mass was opened and a large quantity of dark fluid blood with some clots escaped. Soon bright blood appeared, and the only way the hæmorrhage was stopped was by rapid separation of the placenta, which was found engrafted high up, almost to the liver. A fœtus of apparently about four months' development was found in the sac.

An aseptic, plain gauze tampon was introduced to the very bottom of the pelvis. Few silkworm-gut sutures in upper part of wound. Rest left open. On account of threatening collapse an intravenous infusion of Oiss normal salt solution was made. Improved at once; her condition remained bad for a day or two, when she began to improve, and after that recovery was uneventful.

ARTHROTOMY FOR IRREDUCIBLE BACKWARD DISLOCATION OF ELBOW.

Dr. L. W. Hotchkiss presented a girl, nine years of age, whom he had subjected to arthrotomy, July 30, for the relief of an irreducible, backward dislocation of both bones of the forearm at the elbow which had been sustained five weeks before. The joint was exposed by a posterior, longitudinal incision three and a half inches long.

Above and behind the external condyle was a small shelf of new bone on which the head of the radius rotated. This was chiselled away and adhesions on radial side and around olecranon freed. A second incision was made over the anterior aspect of the joint and on the ulnar side, to expose the joint cavity anteriorly, and to allow easier division of certain bands which prevented reduction of the dislocation. The sigmoid cavity of the ulna contained some new-formed tissue which was cut away with scissors. After division of all the retaining bands and removal of a small portion of the tip of external condyle which had apparently been fractured at the time of the original injury, the bones were easily reduced and the wound closed without drainage. A plaster-of-Paris bandage over a sterilized gauze dressing fixed the elbow at a right angle.

Primary union of the wound under the moist blood-clot was secured. The elbow now has a fair range of flexion and extension, —*i.e.*, flexion to beyond a right angle and almost complete extension. There is slight lateral motility. The patient has a strong, useful joint, and the range of motion ought to increase materially under daily use.

TREPHINING FOR SUBDURAL HÆMORRHAGE COMPLICATING SIMPLE COMMINUTED DEPRESSED FRACTURE OF SKULL.

Dr. Hotchkiss also presented a man, aged twenty-nine years, who was brought to the Manhattan Hospital, August 7, 1895, having

fallen from the fourth story of a building to the ground, striking upon the left side of his head.

On admission to the hospital, immediately after the accident, he was in a condition of moderate shock. His pupils were slightly dilated and he was almost completely unconscious. About a half hour later he was seen by Dr. Hotchkiss. He was then in a condition of stupor which was not complete. His pupils reacted slowly to light. His pulse was rather feeble. The extent of paralysis was not determined. Over the left parieto-temporal region of the skull the scalp was severely contused and infiltrated with blood, but there was no wound. There was a long gutter-shaped depression in the scalp running in an antero-posterior direction, and through this a slight depressed fracture of the skull beneath could be felt, but not distinctly.

By reflecting a flap, made by a large horseshoe-shaped incision over the left parieto-temporal region, the injured area of the cranium was exposed. A fracture was found running from the anterior portion of the left parietal bone and about an inch above its lower border, in a direction about parallel with the temporal ridge, but above it and passing backward and downward behind this ridge where it was lost upon the mastoid and could not be farther traced. Another fracture beginning at about the middle of the squamous portion of the left temporal bone and running across the line of fracture just described, at about a right angle, was lost at the vertex beneath the upper edge of the incision through the scalp. Radiating from the point of intersection of these two main fissures were numerous smaller ones extending into the parietal and into the temporal bone. There was a slight depression of a small triangular piece of bone at the point of junction of two main lines of fracture, but there was no wound in the dura mater beneath. The depressed portion was elevated, and a considerable opening made inside of skull with chisel and rongeur forceps, and the dura exposed. The incision in scalp was now enlarged by one running upward and backward from the posterior limb of the horseshoe, and a much better exposure of injured area obtained. In gnawing away the edge of bone with the forceps a large piece of the left parietal, which was partially detached between, came away. It measured about two inches in length and nearly one and a half inches in breadth, and was marked on its inner surface by the grooves for the anterior and posterior trunks of the middle meningeal artery.

The tearing away of such a large-sized fragment of bone exposed a considerable area of the dura, which protruded into the wound;

was very tense and blue and did not pulsate. A curved incision about two and a half inches long was made through dura, and exit given to a large amount of clotted blood and some brain tissue. The remaining clots were washed away with hot salt solution. The surface of brain exposed was much congested, and an area of laceration in what seemed to be the upper portion of the temporo-sphenoidal lobe was felt by the finger. As the patient's condition at this time was very bad, the dural wound was loosely sutured above, the lower angles being drained by strips of iodoform gauze, as there still seemed to be some oozing from the surface of brain. The edges of scalp wound were quickly brought together by a few sutures and the lower ends packed with gauze. A large, dry, sterile dressing was applied and patient put to bed. The operation was completed without the use of an anæsthetic.

The patient soon rallied from shock and showed marked improvement in symptoms. He passed a comfortable night, and next day was conscious and apparently cognizant of what was going on about him, but completely aphasic. There was right facial paralysis; tongue deviated to the left; eyes normal; slight loss of power of right arm and hand, and loss of muscular sense in fingers. Three days later he was in about same condition as regards speech, but could write his name, and seemed to understand what was said to him.

By September 6 the wound had practically healed except for a small sinus leading down to an opening in the skull, from which there was still some discharge. On dressing the wound this day one of the *internes* injected the sinus with some peroxide of hydrogen solution with the following results: As soon as the H_2O_2 was injected into the sinus the scalp seemed to become inflated and distended, and the patient suddenly became weak and faint, and he developed complete right paralysis of face and right upper extremity and some loss of power in right leg. The speech of the patient, which had been practically regained, became mumbling and unintelligible, and he was unable to articulate distinctly a single word. He experienced, also, intense pain over the left side of head. The condition of the patient was most alarming, and he was quickly put to bed. The pain in head was less by evening, and the next day was very much better. The loss of power of right leg quickly subsided, and the day after the accident he could move it fairly well, as well as the right arm slightly. The effects of this accident gradually subsided, and the general improvement before existing was regained. October 3, eight weeks after the original injury, he was discharged from the hospital with normal speech, and with power in the right arm practically restored, but with persistent right facial paralysis.